

MUREP Precollege Summer Institute (MUREP PSI) Awards – FY2023

Title: ASU Accelerated Research Training Experience & Mentorship In STEM (ARTEMIS) 2.0 Precollege Summer Institute (PSI) Scholars Program

Institution: Albany State University

City/State: Albany, Georgia

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FY: 2023

Summary:

Albany State University, an HBCU, proposes the Accelerated Research Training Experience & Mentorship In STEM (ARTEMIS) 2.0 Precollege Summer Institute (PSI) Scholars Program to continue in its goal of providing authentic STEM engagement opportunities for high school students from traditionally underrepresented populations. The ARTEMIS PSI Scholars Program is a Two (2) Week Residential Camp for high school students (Grades 10 – 12) interested in pursuing a STEM-based career. The goal of the ASU ARTEMIS PSI Scholars program is to utilize NASA’s missions of research, development, and discovery to create a residential experience that will attract local high school students from groups traditionally underserved and/or underrepresented in STEM fields to STEM and engage them in authentic STEM activities. The goal of this project is to equip them with the tools necessary for success in college STEM degree programs leading to STEM careers. The specific objectives of the ASU ARTEMIS PSI Scholars Program are to:

- Enhance students’ STEM identity, skills, and knowledge by engaging them in NASA based authentic STEM learning activities;
- Increase students’ preparedness for STEM college degree programs by building a powerful connection to ASU, faculty mentors/advisors, and peers who share interests in STEM; and
- Increase students’ awareness of STEM careers by enabling connections to STEM professionals and NASA’s missions.

The program utilizes a Louis Stokes Alliances for Minority Participation (LSAMP) framework and incorporates academic, social, and professional components to ensure recruited students become accustomed to the academic requirements of a STEM student and ultimately a STEM professional. These students are then retained within the STEM pipeline. To do so, The ARTEMIS Institute is a collaboration between ASU STEM Faculty and STEM Partners to provide authentic hands-on, inquiry-based, and project-based STEM learning activities. Students will also get exposure to real life STEM professionals through a daily guest speaker series. Additionally, students will be paired with a STEM mentor (current undergraduate student majoring in STEM). Using the Theme “Mission to Mars”, the students will participate in NASA-based activities related to power generation and transmission; remote and autonomous vehicles and rocket propulsion; the geology of Earth and other planets; and the biology and chemistry of space travel. Students will become immersed in the expectations of life as a STEM student at ASU, gain useful knowledge about the campus, and build support networks to help ensure success in their life and in academics. Through the synergistic efforts of ASU and its Partner Network, the ARTEMIS PSI Scholar program will recruit, retain and enhance the success of underrepresented populations in STEM careers.